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THE HOSPITAL MANAGERS PROFILE ASSESSMENT

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Hospitals have to adapt constantly to external or internal factors, such as demographic, epidemiological peculiarities, implementation of new technologies, changes in financing conditions, competition, human resource assurance level or other health reforms. In order to ensure functionality, competitiveness and institutional efficiency during transition or adaptation, institutions have to change their vision and approach, have to develop other skills and managerial behaviors.

THE PURPOSE OF THE STUDY: The evaluation of the hospital manager profile and identification of the optimal leadership model in the in the Republic of Moldova current context.

METHODOLOGY: cross-sectional, descriptive study. The quantitative and qualitative component to assess the perception of the hospital managers and stakeholders.

CONCLUSIONS: Despite the high level of professional training and managerial experience as hospital director, most of them faced different levels of vulnerability in certain areas, thus, regardless of the field of training and the level of training, the manager needs support tools such as the administative committee or the audit committee to ensure effective management.

Keywords: Hospital, health manager, professional training.

INTRODUCTION

The last 20-30 years have been marked by a spike in health care costs. Advances in diagnostic technologies, the personalized medicine implementation, progresses achieved in biomedical research have contributed to the early diagnosis and end-stage diseases solutions, the growth of the pharmaceutical market, but also, the high-technologies thatlead to the quality of life improvement (organ transplantation, prostheses, interventional cardiology, ophthalmological surgery) or non-vital interventions, which increase patient satisfaction (aesthetic surgery, bariatric surgery, etc.). The expansion of the range of services, accessibility, but also the patient awareness level contributes significantly to the development of the medical market, to the Gross Domestic Product (GDP) increase and competition.

In the Medical Services Market Report [1, 2] the global hospital services market was valued at USD 10.44 trillion in 2021, with an estimated growth of 8.7% annually during the period 2022-2030 to reach USD 19.61 trillion USD in 2030, the most important market was considered considered that of the US, while the fastest progress was recorded in the Asia-Pacific region. Gradually, the medical sector became an important pillar of the economy and a reelvant business sector. There are various forms of the hospital organization (public, private, mixed, community) with different financing models (public-integrated, private, insurance, out-of-pocket payments) but also various targets or needs for the institutional management or governance.

All these reforms influenced the complexity and the field of the manager activity, the need for his competence development to ensure both the quality and safety of medical care and organizational safety.

THE PURPOSE OF THE STUDY:

To evaluate the hospital manager portrait and to identify the optimal leadership model in medical institutions of the Republic of Moldova (RM).

OBJECTIVES:

To specify the hospital manager in the RM healthcare system.

To evaluate the pattern of managerial development of current managers.

To dentify the major challenges and knowledge needs in hospital leadership according to hospital managers.

To identify the optimal hospital leadership model in the stakeholders oppinion.

In order to evaluate the manager portrait and his training path, we designed the following research.

RESEARCH METHODOLOGY

We conducted a descriptive, mixed study including quantitative and qualitative components, during the period October 2022-January 2023.

Quantitative component- Transversal study, intended for hospital managers. The questionnaire was distributed via e -mail to all public hospital managers (68 institutions), regardless of capacity or type of activity.

The qualitative component- was carried out in two stages.

Stage 1. In-depth interviews (IP) to evaluate the hospital managers opinion.

Stage 2.Evaluation of the opinion of the main actors.

Focus-Group 1 (FG1) - first-year Public Health master's students.

Focus-Group 2 (FG2) – Local/central authorities

Focus-Group 3 (FG3) – Authorities responsible for regulating the training process.

Focus-Group 4 (FG4) - Authorities responsible for implementing training policies.

Research methods

Statistical processing was performed using the statistical program MedCalc and Microsoft Excel version 2017.

RESULTS

The hospital manager role in the RM's healthcare system

The organization model of the healthcare system in the RM respects the principles of accessibility, equity in the delivery of medical services and solidarity in the medical assistance financing.

According to the statistical yearbook of the RM data, 2022 edition, the hospital system consists of 86 institutions of which 45 are municipal/district, 16 republican institutions, 7 departmental and 18 private hospitals. There are 17,329 beds (66.5 beds/10,000 inhabitants) [3] within these hospital institutions, with a hospitalization rate of 17.4 cases/100 inhabitants.

The hospital network of the RM has endured various reforms in the last decades – the reduction of the hospitals number, the beds number reduction, the changes in the spectrum of services, the insurance system implementation and changes of the financing mechanisms, etc.

Following the reforms, the heads of medical institutions were not only tasked with organizing the treatment and diagnosis process, but also with solving financial, economic, legal, moral, ethical and other problems that require an integrated approach. All this determined the relevance of creating training programs for ealthcare leaders that would allow managers to ensure access to medical services and to maintain the system functionality.

Thus, in 2004, the concept of CHIEF DOCTOR was changed to hospital DIRECTOR.

The chief physician activity was oriented mainly on clinical aspects, he had limited decision-making autonomy and a conservative management style, but with a minimal risk of budget disuse.

The position of director provides extensive decision-making autonomy, dynamic and pro-active management, but it is associated with a major risk of misappropriation of money, risk of corruption, as result has emerged the need for training and development for managerial skills, but also for implicative supervision through the establishment of administrative councils (the principle of corporate governance).

General characteristics of the study group

Questionnaires were distributed in 68 public hospitals, 57 questionnaires were received and validated (response rate 83.8%). According to the type of institution, managers of district institutions predominated 58%, the response rate in this category being up to 94.3%, and among departmental institutions there were only 3 respondents, the response rate 42.9%.

According to the institutions capacity, 37 (64.9%) managers declared that they conduct a small institution, with a capacity of up to 200 beds, 14 (64.9%) institutions have a capacity of 201 -550 beds, and 6 (10.5%) of the managers declared a capacity of more than >551 beds. Depending on the served territory, in all categories of hospitals low-capacity hospitals predominate, while high-capacity hospitals are of republican or municipal level (including CMH Bălți).

Hospitals are important pillars of society, with the role of providing medical assistance, development and training of human resources, development and implementation of high performance services, role of employer. All this determines the complexity of the directors activities and responsibilities, thus, in the research framework, we aimed to sketch the portrait of a hoaspital manager in the RM.

The portrait of the hospital manager in the RM

The hospitals directors in the RM are usually young people, aged up to 54 years (56.1%), 9 of the 57 questioned managers were under the age of 44, and they manage district or municipal institutions of small capacity (with only 1 exception). There are only 6 managers in the over 65 age range.

The international experience approaches differently the involvement of managers over the age of 56, in Denmark their rate reaches 56.9% [4], much less in Serbia - 38.6% [5], 7.5% in Turkey [6], while in China the manager of the hospital has an average age of 40.6 -47.2 years and an experience of hospital activity up to 21-23 years [7]. In the present study, 71.9% of the managers had an Health Care experience of more than 20 years, 33.3% had experience of 6-10 years in a management position, 28.1% had experience of 11-20 years as a hospital manager, and 21.1% have been active as a manager at different organizational levels of the Health System for 20 years or more. Our data are similar to studies carried out by Liang in China (2020) [7], in the study carried out in Turkey, the lenght of managerial activity of 6-10 years is described in 26.3% of cases, and 8.1%of them had a managerial experience of over 21 years [6]. Although in the middle age groups the differences are not essential between studies conducted in European countries, the United States or Asia; in the young group (up to 45 years) the deviation was significant. For example, the case study developed in Turkey describes a 36% rate of hospital managers aged up to 41 years; of the total managers evaluated, 38.9% had a managerial experience of up to 5 years [6], similar practices are in China where managers were employed as hospital director for 4-6 years, and had a medium of 9-10 years of total managerial experience.

In terms of experience as a hospital director, only 5 people declared that they had experience of up to 1 year, among them 1 had worked previously as a manager for up to 5 years, 4 people had management experience for more than 6 years. It should be noted that managers hold this position for 2-5 years in 42.1% of cases, 6-10 years in 26.3% of cases, and 13 people have been active as hospital managers for more than 10 years (in some cases discontinuously).

It becomes obvious that the demographic aspects of the manager are in strict accordance with the policies and legislative framework of each state, with the training model and the requirements for the selection of the manager, if the lenght of the activity in the system

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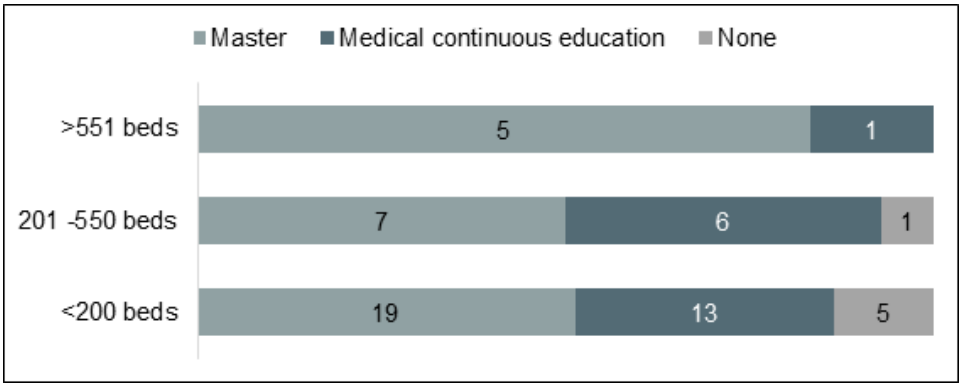
Figure 1. Distribution of respondents according to the institution's capacity and managerial training



is relatively similar, the lenght of the managerial activity until obtaining the position of director is relatively similar, while the age of occupation differs on average by up to 10 years, what remains for comparison is the lenght of studies.

Healthcare management studies remains one of the biggest dilemmas at both, the meso- and macro-level of governance. This is where the reforms to reorganize the various health systems start. Who do we train? While? At what cost? With what risks?

Evaluation of the level of training/studies

According to the field of basic studies, all 57 respondents had higher medical education, followed in 56 (98.2%) cases by postgraduate studies (residency, internship) in clinical fields. The highest level of training is the habilitation, held by 2 managers who lead large hospital in which intensive scientific-didactic activity is simultaneously carried out, and 9 of the republican or municipal leaders hold the title of doctor of medical sciences. A peculiarity of managers with a high level of academic qualification is the affinity for self-education, they all work in institutions that collaborate harmoniously with Medical University and university clinics, 9 out of 11 have master's degrees in Public Health or master's in economics. 51 (89.5%) managers have specific managerial studies: 31 (54.4%) managers have followed/or are pursuing master's studies in public health/economics, 20 (35.09%) have been trained through postgraduate continuing education courses, and 6 low-capacity hospital managers declared that they do not have any managerial training (all reached the position by appointment or interim) (Figure 1).

We continued the research by assessing the reasons and the chronological aspect of managerial training (in cases where the manager or future manager chose to follow it). From the data reported in the survey, the majority of managers who chose to pursue master's studies felt the need in 27 cases out of 31, in 3 cases it was out of curiosity. One case stated that he felt obligated, without specifying the details. Most leaders intended to apply for a leadership position before being in the role, so 17 leaders (out of 31) completed the studies before the nomination. Postgraduate continuing education courses were mainly selected after nomination (in 17 cases out of 20), more often out of necessity,

Asked how they got this position – 47 (82.5%) went through a public competition, and 10 by nomination or interim, at the same time 43 of them believe that they were selected mainly due to the expressed managerial potential, 11 – mainly due to clinical performances, and in 3 other cases another answer was offered.

Barriers and knowledge needs for managerial activity

In order to identify the knowledge ncesity, we asked managers what short-term (1 year) and long-term priority goals they have, whicht were their biggest challenges and what aspects led them to study further.

The proposed questions were of ranking type. Most frequent short term goal was the ability to provide qualitative, high-performance services (average position score 2.47, $p<0.001$), 26 of the managers (45.60%) ranked this target on first position, followed by the achievement of quality indicators (score 2.84, $p<0.001$) and patient safety (score 2.95, $p<0.001$). Although apparently one of the priorities of an organization should be financial indices, the real state in the medical system is different. According to the WHO, the main health system goals are to ensure the population health, to responde at the population's expectations, to provide a fair and protective financial contribution and to reduce the financial risk. The answers of the surveyed managers are based on these goals, as evidenced by the ranking of financial indicators only on the 4th position (score 3.49, $p<0.001$).

The main long-term priority was the provision of highly qualified personnel, 22 (38.60%) managers placing this objective in the 1st place, and 66.60% of managers in the top 3 priorities (score 1.98, p<0, 0001). Human resources constitute the key element of the system, without which the institutions functionality cannot be ensured. At global and regional level, there is a crisis in healthcare human resources, a field declared as a priority worldwide and it was reflected in the strategic documents of the Ministry of Health. The health system development strategy for the period 2016-2025 emphasizes the need for "continuous development of human resources, rational use of existing staff, adequate and diversified training of high-performing staff for the health system through the following measures: a) assessing the needs and planning the provision of human resources in the health system; b) ensuring the staffing of institutions in rural regions; c) motivating and stimulating the personnel in the health system; d) improving the policies for the training of personnel in medical and pharmaceutical education" [8].

Two other selected priorities were the implementation of new technologies (score 2.56, $p<0.0001$) and institution reconstruction (score 3.00, $p<0.0001$). The widening range of services was placed on the 4th position, being a particularity of highly specialized institutions.

Although the surveyed directors have well-established priorities, most of them consciously assuming this position (82.5% were selected through a competition), part of them had diferrent level of vulnerability at the

initial stages. Uncertainty was determined on the one hand by individual factors such as lack of experience, predominantly clinical and less managerial knowledge, insufficient knowledge of the institution for outsiders, or on the contrary, established friendships that affect the objectivity of the decision. There are also general factors such as the lack of support from the employers or the management team, or the lack of communication with the primary healthcare sector.

In an in-depth interview, a manager with no previous experience reported that "after his employment, the head of the institution accounting service resigned, the head of the economic service went on unused furlough for 3 months, and the lawyer went on sick leave for a long period".

The directors most often felt insecurity in the Financial Management field, 16 (28.10%) of them selected it as the biggest challenge, while 89.50% described it as being in the top 3 (score 2.29, p<0.0001), an additional 40.40% leaders declared that this was the field for which they had to study more, and for 89.50% was one of the most important fields of study.

During the in-depth interview, a manager reported that *"I knew the institution very well down to the smallest details, I had the support of the collective and the management team, but when I had to sign the first invoice of 1 mln. I felt an insecurity. This was the decisive moment to initiate training in the financial field".*

Another manager confirms that for him the biggest challenge was the *"Financial field, any decision can be contested. The decision is made in January for the management year, with an unapproved budget, you have no security of income, at any moment you can be accused of spending on repairs and not paying salaries on time. The decision is always at the limit of risk".*

Designing the hospitals strategic development, human resources management and legislation were also sensitive activities, especially at the initial stages (ranking score 3.12, 3.18 and 3.75 respectively), but they felt the need to study further predominantly the legislation (ranking score 3.28, p;0.0001), for 11 (19.30%) managers being the most important subject of study.

In another interview, a director reported: *"I was used to managerial functions, I had implemented the culture of communication, the organizational culture, the mechanisms for achieving quality indicators in a private institution. I also learned financial management and strategic planning. Planning and prioritizing development without affecting current funding. Developing, motivating and maintaining highly qualified human resources. I found difficulties in managing human resources compared to private institutions, the legislation protects the employee's rights and does not allow us to fire the ineffective employees."*

During the focus group interviews, the authorities involved in the regulation and implementation of training processes, in the process of selecting and evaluating managers, confirmed that the greatest vulnerabilities in managerial activity are the financial and law aspects.

In FG2 it was stated: *"When a manager comes into office, he comes with a level of training. Yes, he has training in the clinical field, but he has no training in law, labor legislation, finance, communication. Public communication is learned on the go, or there are courses that can be accessed, but for the rest domains, additional effort is required."*

Furthermore, respondents from FG3 highlighted the following areas: "human resources management, public procurement", "Quality management is less known, which leads to difficulties in developing the culture of quality ".

Another opportunity is *"self-training and experience exchange",* claims a manager.

In recent years, considering the complexity of the health system, but also the costs for the training of a clinical manager, there have been debates and contradictory concepts at the global level regarding the studies for hospital manager development.

If we focused on the field of university studies, most directors assume that medical studies are mandatory (89.5%) accompanied by managerial studies (63.2%) or economic studies (47.4%).

One of the directors is of the opinion that: *"the future manager must have medical studies or training in economics. Hospitals has 2 purposes: providing medical services and covering costs or financial growth. The rest - legislation, policies, are secondary issues. That's why the manager shouldn't be a lawyer".*

Although the majority of respondents who participated in the quantitative study and the in-depth interview argue the need to maintain the clinical leadership, from the perspective of the decision-makers, things look slightly different. During the group interviews with local and central authorities representatives, the following opinions were expressed:

FG3: *"Not necessarily a doctor. He can be an economist, maybe a lawyer. But the most suitable doctor with managerial studies."*

FG2: *"Manager with health management studies. I do not welcome the concept of a doctor necessarily becoming a manager, because the huge resources for training a doctor, including the individual's personal resources. Why to go through an 11-year path to become a doctor and quit to become a manager? don't actually practice medicine. This legacy concept is the wrong approach in my opinion. if a doctor personally decides to be a manager, we offer him the opportunity, but we also offer this chance to others - economists,..."*

FG3: *"My opinion is that we cannot compare the institutions. For a small or medium institutions it can be a doctor; for multidisciplinary institutions, with many deputy directors, an economist would still cope with the function, but after a prior training, because the basic purpose of the institution is medicine and the clinical part must prevail".*

In the last 20 years, there has been a multitude of worldwide research aimed at this topic, but most of them have different methodologies, criteria or evaluation tools that make it practically impossible to compare the results. But even the few multinational studies that decided to apply a single tool for its validation and subsequent implementation faced differences in the organization of the education system, the health system, or the governance mo-del.

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Thus, we tried to find out the opinion of the actors involved in the training process of the managerial staff, they voiced the following visions:

FG4: *"A leader needs experience, an economist has no space for manoeuvre. A doctor could have intermediate experience – chief of department, subdivision - experience gain through interaction with the leader. The graduate of another faculty leads a medical institution from the start - and he will have to be trained in multiple medical fields to be able to orient himself."*

FG4: *"I think there are 3 basic models. 1. the ideal model - doctor with additional training, but it is the most expensive. 2. medical processes managed by the doctor, the rest by management specialists - I would go at least for this option. 3. the Anglo-Saxon model that emphasizes professional managers."*

We can easily see that opinions are dispersed not only between different countries and systems, but also between representatives of the same system, or of stakeholders at different levels. As a result, respondents from all stages of qualitative research were asked: *"How do you think the SWOT analysis of the clinical and non-clinical hospital manager in the RM would look?"*

It was the stage of the research where the saturation level of responses occurred most rapidly, not only within the same group, but also between groups. Practically every third answer was repeated in different formulations.

After the thorough analysis of these models, the following conclusions were drawn:

FG4: *"The clinical manager is really very expensive. First of all, because Medical University has the most selective criteria for admission, the highest costs, time costs, but still the most effective in achieving strategic results, quality and maintaining the accessibility of medical services would be the clinical manager".*

FG3: *"The question would be relevant, after several years, when preconditions would be created to select managers from other fields, for now in the RM they do not exist, we are only talking about the experience of other countries. But there the preparation of the system and the people started many years ago. But anyway, sometime we have to start discussing this topic. To the gradual modification of the organization of the system, of the way of training and perhaps of the way of governance."*

CONCLUSIONS

In the process of reforming the health system, the duty of hospital directors was not only to ensure the medical activity, but also to solve the legal, financial, ethical or moral aspects that require an integrated approach to the administrative process through the use of essential skills that are not found in the basic curricula of any specialty currently existing in the RM. The hospital leaders being reoriented by the organization of the curative-diagnostic process towards the administrative-household activity of a medical institution, a phenomenon that determined the relevance of the creation of training programs for the heads of medical institutions. The rate of development of the medical field, the degree of technology but also the increase in ethical and legal requirements, impose the need to implement a dynamic management,

The evaluation of the portrait of the hospital manager from the RM shows that despite the high level of professional training (54.4% have a master's degree) and managerial experience as a director (42% over 5 years), most of them have faced various degrees of vulnerability in the financial (89.5%) and legislative fields, which led him to study additionally.

In recent years, considering the complexity of the health system, but also the costs for the training of a clinical manager, there have been discussions and contradictory concepts on the global level regarding the studies for the training of this specialist. In the RM, most directors consider that medical universitary studies are mandatory (89.5%) accompanied by managerial (63.2%) or economic postgraduate studies (47.4%), while from the perspective of decision-makers, things look slightly different. The need for post-graduate master's studies in public health, or leadership in health, without the obligation to possess medical universitary studies, is still supported. At the same time, regardless of the field and the level of training,

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